

Shane Empey, P.E. Structural Engineering Heath Residence:
Project: Entry Addition/Remodel

Client: Arciform

Proj. No.: 13-103

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By: SAE

Sheet No.: 1/1

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★ Field Memo	Subject:	City of West Linn chapter 27.060 F&G, & chapter 27.080 B	Time: -
☐ Job Observatio	n To:_	Bradley Horne, Richard DeWolfe	Ref. Sheet: -
☐ Revision Sketch	ı Dist	ribution:	

HAVE PROVIDED CONSULTATION FOR THE DESIGN OF THE STRUCTURAL SYSTEM FOR THE PROPOSED FRONT ADDITION AND CONCRETE ENTRY STAIRWAY. IT HAS BEEN DISCOVERED THAT ALTHOUGH THE PROPERTY IS ELEVATED ABOVE THE RIVER AND IS ON A RELATIVELY FLAT LOT, IT HAS BEEN D

I HAVE BEEN ASKED TO PROVIDE MY OPINION OF THE LIKELIHOOD THAT THE PROPOSED SCOPE OF CONSTRUCTION WOULD IMPACT FLOOD LEVELS. BY DEFINITION, ANYTHING SUBMERGED IN A FLUID WITH ALL OTHER VARIABLES REMAINING CONSTANT, WILL RAISE THE FLUID LEVEL. I DON'T BELIEVE ANYONE IS ASKING FOR THIS ANSWER. IT IS MY UNDERSTANDING THAT IN THIS CASE, THE INTENT IS FOR A CIVIL ENGINEER, SOMEONE WITH ACADEMIC KNOWLEDGE OF DAMS AND DIKES, TO CATCH THE RARE OCCURRENCE WHEN A CONSTRUCTION PROJECT IS ALTERING THE TYPOGRAPHY OF THE RIVER BANK SUCH THAT IT MAY AFFECT FLOODWATERS ENOUGH TO CAUSE DAMAGE TO NEIGHBORING PROPERTIES.

THE PROJECT IN QUESTION IS LOCATED ON A RELATIVELY FLAT LOT WHICH IS ELEVATED ABOVE THE RIVER. THE ADDITION IS LOCATED IN AN INSIDE CORNER SUCH THAT THE RIVER FLOW EXPOSURE OF THE STRUCTURE HAS NOT BEEN INCREASED. THE CONCRETE ENTRY STAIRS NEXT TO THE DRIVEWAY WOULD INCREASE THE RIVER FLOW EXPOSURE BUT THE 3FT WIDE X 1FT TALL OPENING BETWEEN THE STAIRS AND BUILDING COULD ALLOW FOR A GREAT DEAL OF WATER FLOW. THE STAIRS WOULD NOT PRACTICALLY IMPEDE THE RIVER FLOW ANY MORE THAN A DRIVEWAY FULL OF CARS WOULD.

WITH SPECIFIC REGARDS TO:

27060 (F) - THE ADDITION WILL REQUIRE EXCAVATION OF SOIL. THE STAIRS HAVE A FOOTPRINT APROX. THAT OF A MINIVAN. I DO NOT BELIEVE THIS WILL CAUSE A SUBSTANTIAL INCREASE IN FLOOD LEVELS. DURING THE OCCURRENCE OF THE BASE FLOOD.

27060 (G) - 1 DO NOT BELIEVE THIS PROJECT IS LIKELY TO IMPACT THE FLOOK-CARRYING CAPACITY OF THE RIVER DUAL FUNCTION VENTS HAVE BEEN PROVIDED TO ACCOMMODATE OPTIMAL RIVER FLOW DURING A FLOOD.

27.080 (B) -

- 1. THE DUAL PURPOSE VENTS BEING USED ARE MARKETED TO ACCOMMODATE 200 SQ FT OF FLOOR AREA. THE ADDITION IS LESS THAN 100 SQ FT.
- 2, : · · TO MY KNOWLEDGE THE BOTTOM OF THE OPENING WILL BE WITHIN 1 FT OF GRADE;:
- 3. TO MY KNOWLEDGE THE DUAL PURPOSE VENTS ARE MARKETED TO OPEN UPON FLOOD CONTACT.
- 4. THE AREA BELOW THE FLOOR IS ONLY INTENDED AS CRAWLSPACE.
- 5, ; . . . TO MY, KNOWLEDGE. THERE ,ARE, NO :PLANG :FOR NON-CRAWLSPACE !USE.
- 6. TO MY KNOWLEDGE THERE ARE NO PLANS FOR ANY FINISHES.

TO CONCLUDE, I DO NOT FEEL THE PROPOSED ADDITION AND STAIRS WILL PRACTICALLY EFFECT THE FLOW OF THE FLOOD RIVER. THIS IS NOT BASED ON CALCULATIONS, ONLY MY INITIAL JUDGEMENT. SHOULD FURTHER EXPLORATION BE REQUIRED I COULD SEE TO IT THAT SUCH ANALYSIS BE PERFORMED.

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